

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) A method for identifying a test compound having antioxidant activity, said method comprising the steps of:
 - (a) administering a test compound to a homozygous transgenic mouse in which the genes encoding Manganese Superoxide Dismutase (MnSOD) have been inactivated;
 - (b) determining lifespans ~~observing phenotype~~ of the mouse to which the test compound was administered ~~of step (a)~~ and the mouse to which the compound was not administered;
 - (c) identifying a test compound having antioxidant activity where the lifespan ~~phenotype~~ of the mouse to which the test compound has been administered ~~of step (a)~~ is longer ~~closer to a normal phenotype~~ than the ~~phenotype that~~ of the homozygous transgenic mouse to which the test compound has not been administered.
2. (original) The method of claim 1 wherein said homozygous transgenic mouse is a SodCJE(-/-).

3-8 (canceled).

9. (new) The method of claim 2 wherein the homozygous transgenic mouse is about 3 days of age.

10. (new) A method for identifying a compound having antioxidant activity, said method comprising the steps of:

(a) administering a compound along with a known antioxidant which does not cross the blood brain barrier to a homozygous transgenic mouse in which the genes encoding Manganese Superoxide Dismutase (MnSOD) have been inactivated;

(b) determining lifespans of the mouse to which the compound and the known antioxidant were administered and the mouse to which only the known antioxidant was administered;

(c) identifying a compound having antioxidant activity where the lifespan of the mouse to which the compound and the known antioxidant have been administered is longer than that of the mouse to which only the known antioxidant has been administered.

11. (new) The method of claim 10 wherein said homozygous transgenic mouse is a SodCJE(-/-).

12. (new) The method of claim 11 wherein said homozygous transgenic mouse is about 3 days of age.

13. (new) The method of claim 12 wherein the known antioxidant is Manganese 5,10,15,20-tetrakis(4-benzoic acid) porphyrin (MnTBAP).
14. (new) A method for identifying a compound having antioxidant activity, said method comprising the steps of:
 - (a) administering a compound along with an antioxidant which is known to cross the blood brain barrier to a homozygous transgenic mouse in which the genes encoding Manganese Superoxide Dismutase (MnSOD) have been inactivated;
 - (b) determining lifespans of the mouse to which the compound and the antioxidant were administered and the mouse to which only the antioxidant was administered;
 - (c) identifying a compound having antioxidant activity where the lifespan of the mouse to which the compound and the antioxidant have been administered is longer than that of the mouse to which only the antioxidant has been administered.
15. (new) The method of claim 10 wherein said homozygous transgenic mouse is a SodCJE(-/-).
16. (new) The method of claim 11 wherein said homozygous transgenic mouse is about 3 days of age.
17. (new) The method of claim 16 wherein the antioxidant is Euk-8.